



To cite this article: Dr. B. Sandhya Rani and Pangala. Chandrakala (2026). AN EMPIRICAL STUDY ON LOAN UTILISATION UNDER PMMY BASED ON BENEFICIARY CHARACTERISTICS, International Journal of Research in Commerce and Management Studies (IJRCMS) 8 (3): 30-47 Article No. 740 Sub Id 1240

AN EMPIRICAL STUDY ON LOAN UTILISATION UNDER PMMY BASED ON BENEFICIARY CHARACTERISTICS

Dr. B. Sandhya Rani¹ and Pangala. Chandrakala²

¹Associate Professor, Department of Commerce, Osmania University Hyderabad.

²Senior Research Scholar, Department of Commerce, Osmania University Hyderabad.

DOI: <https://doi.org/10.38193/IJRCMS.2026.8302>

ABSTRACT

The present study examines the impact of beneficiary characteristics such as demographic and socio-economic variables on the loan utilization factors under the Pradhan Mantri Mudra Yojana (PMMY) scheme. For present study It considered on five independent demographic and socio-economic variables of beneficiaries such as “Age, Gender, Education, Occupation and Income. Moreover, it considers following 6 dependent variables of loan utilization such as “Awareness of the scheme, Type of Loan, Type of Bank, Purpose of Loan, Processing Time and Sufficiency of Loan Amount”. The primary objective of study was to assess the impact of select independent factors on their borrowing behaviour and loan experience of beneficiaries under PMMY. To analyze this it adopted a descriptive, analytical methodology framework, based on data collected using primary sources. For the analysis of data, it adopted “Percentage & Chi-square” statistical test at 5 percent level of significance. While the results indicates that the influence of select independent factors on loan utilization is not uniform across all dimensions. The age of beneficiaries shows partial association and it significantly influencing only with the purpose of loan and processing time. While, gender does not exhibit any statistical association with any of the loan utilization variables, indicating uniformity in access and experience for both male and female beneficiaries. In contrast, beneficiary education level emerged as a key determinant, showing significant relationship with all the dimensions of loan utilization. Similarly, beneficiary occupation also significantly influencing awareness, type of bank, purpose of loan, processing time and loan sufficiency, suggesting that employment status shapes the financial exposure and borrowing behaviour. Whereas, beneficiary Income level also demonstrates a significant association with almost all loan utilization variables, except the type of loan, indicating that economic capacity of beneficiary plays an important role in shaping borrowing patterns and loan experience. Overall, these findings suggest that beneficiary socio-economic factors such as education, occupation and income-levels have a stronger influence on PMMY loan utilization compared to their demographic characteristics like age and gender. Finally, it concludes that by improving the financial literacy, strengthening awareness programs and simplifying loan procedures for beneficiary will essentially enhance the effectiveness of the PMMY.



KEYWORDS: PMMY, Loan Utilization dimensions, Socio-Economic & Demographic factors.

1. INTRODUCTION

Over the past decade financial inclusion has emerged as a key economic component of the Indian economy, focusing on this, the Govt. of India, has introduced a key initiative like “Pradhan Mantri Mudra Yojana (PMMY)” in the year 2015, with an aim to bridge the financial gap faced by the small entrepreneurs by offering them collateral-free loans to non-corporates and non-farm sectors, through key financial institutions such as private banks, regional rural banks and micro finance institutions (Government of India, 2015)¹. Because these sectors often face several challenges, such as lack of sufficient credit facility, high dependence of informal lending sources and limited financial literacy. To tackle these problems systematically PMMY categorize loan into three schemes, such as “Shishu(up to ₹50,000) , Kishore (₹50,000 to ₹500000) and Tarun (5-10 lakh) schemes” each representing different stages of business development, from initial start-ups to business expansion (Reserve Bank of India, 2019)².

As per recent reports of Government of India 2023, PMMY has witnessed the substantial growth at the national level, with over 40 crore loans have been sanctioned under the select schemes, amounting to more than ₹23 lakh crores (Government of India 2023)³. Out of this a significant portion of loans fall under Shishu category, it indicating primary focus on micro level entrepreneurs and first-time borrowers. While it's also raising concerns regarding the limited scaling of enterprises to higher schemes such as Kishore and Tarun (NITI Aayog, 2021)⁴. It suggesting that although PMMY is successfully expanding credit access but it's effectiveness in fostering sustainable business growth remains an area of concern.

Also, recent statistical data of the Telangana State, shows that loan disbursements have been grown significantly over the years, with a noticeable rise in number of beneficiaries and volume of credit extended (Government of Telangana, 2023)⁵. However, few reports also pointed out that the impact of PMMY is not uniform across all the regions and demographic groups. It observed several variations in awareness levels, accessibility and loan utilisation pattern highlighting the influence of socio-economic and demographic factors on the effectiveness of the scheme. These disparities in loan distribution, bring attention to critical issues, highlight the role of demographic & socio-economic factor in impacting access to loan utilisation of institutional credit. Moreover, factors such as Age,

¹ Government of India. (2015). Pradhan Mantri Mudra Yojana (PMMY) guidelines. <https://www.mudra.org.in>

² Reserve Bank of India. (2019). Report on trend and progress of banking in India. <https://www.rbi.org.in>

³ Government of India. (2023). Pradhan Mantri Mudra Yojana progress report. <https://www.mudra.org.in>

⁴ NITI Aayog. (2021). Financial inclusion in India: Achievements and challenges. <https://www.niti.gov.in>

⁵ Government of Telangana. (2023). Economic survey of Telangana 2022–23. <https://finance.telangana.gov.in>



gender, Income, occupation and education level are affecting the borrower's ability to access financial resources and effective utilisation of it for production purpose (World Bank, 2018)⁶. Additionally, several other challenges such as limited financial literacy, procedural delays and uneven access to banking infrastructures further complicate the effectiveness of PMMY scheme (Reserve Bank of India, 2020)⁷.

Despite growing literature on financial inclusion and micro finance existing studies largely focuses on overall performance of PMMY at national level. But regional level studies with specific focus to micro-level empirical studies on examining the impact of demographic & socio-economic characteristics on loan utilisation pattern relatively lacks with particularly to the Telangana State. This highlights the need for more focussed study to better understand the PMMY implementation at regional level. In addition to this PMMY contributes significantly to broader national development initiatives such as "Make in India & Atmanirbhar Bharat", which emphasizing self-reliance and sustainable economic growth (Government of India, 2020)⁸. By enabling individuals to establish small & micro businesses this scheme promoting employment generation, income enhancement and regional economic development.

In this context, the present study aims to analyze the relationship between select demographic & socio-economic dimensions and loan utilisation pattern under the PMMY with special reference to the Telangana State. It helpful to understand how select borrower dimensions influencing the key aspects of loan utilisation such as "Awareness, Loan Type, Bank Preferences, Purpose of Loan, Processing Time and Loan sufficiency". To achieve this the study adopted a quantitative research design approach based on primary data collected from PMMY beneficiaries. Moreover, statistical tools such as percentages and chi-square analysis are adopted to examine the relationship between the study variables. It ultimately helpful to the policy makers and financial institutions to develop targeted strategies to enhance the effectiveness of PMMY, by ensuring that it's benefits are equally distributed among the various sections of the society.

2. LITERATURE REVIEW: Several studies have examined the PMMY from the perspective of financial inclusion and economic growth.

- **PMMY and Financial Inclusion:** A substantial body of literature recognizes PMMY as an important policy instrument in advancing financial inclusion in India. According to Rajagopal (2022), the scheme has considerably improved access to formal credit among populations that

⁶ World Bank. (2018). Financial inclusion overview. <https://www.worldbank.org>

⁷ Reserve Bank of India. (2020). *Financial inclusion and development report*. <https://www.rbi.org.in>

⁸ Government of India. (2020). Atmanirbhar Bharat Abhiyan: Economic package. <https://www.india.gov.in>



were previously excluded or underserved by the banking system. It has enabled the gradual integration of informal sector enterprises into the formal financial framework, thereby strengthening economic participation and financial stability. In a similar vein, Kumar and Shobana (2025) argue that PMMY has expanded access to institutional finance among disadvantaged groups, particularly women, Scheduled Castes, and economically weaker sections. Their findings suggest that the scheme has reduced reliance on informal lending channels and contributed to more inclusive growth. Additionally, Chaturvedi and Mishra (2024) highlight that PMMY has enhanced financial awareness and literacy among beneficiaries. However, they also note that the level of awareness remains uneven across different regions and socio-economic categories, indicating the need for more targeted policy interventions.

- **Impact on Entrepreneurship and MSME Development:** Several empirical studies have explored the role of PMMY in promoting entrepreneurship and supporting the growth of micro, small, and medium enterprises (MSMEs). Aggarwal and Manjeet (2022) observed that access to PMMY loans has positively influenced business outcomes by enabling entrepreneurs to scale operations, enhance productivity, and improve profitability. The study emphasizes that the availability of institutional credit has reduced financial constraints faced by small enterprises. Similarly, Ezhilarasan et al. (2025) report that the scheme has significantly contributed to the expansion of the MSME sector by increasing both the number of beneficiaries and the volume of credit disbursed. Their findings also indicate that PMMY has encouraged self-employment and helped mitigate unemployment, particularly in rural and semi-urban regions. Furthermore, Sheba and Vasanthi (2024) underline the importance of PMMY in fostering rural entrepreneurship, noting improvements in income levels and economic independence among borrowers. At the same time, they identify key challenges such as inadequate business skills and limited financial planning capabilities among beneficiaries.
- **Financial Performance and Trends in PMMY:** Research focusing on the financial performance of PMMY indicates a consistent upward trend in loan disbursement and outreach. Ashwath and Sachindra (2025), through an econometric analysis, report steady growth across all loan categories, including Shishu, Kishore, and Tarun. However, their study also highlights significant regional variations in performance, suggesting differences in the effectiveness of implementation. Kumar and Varadarajegowda (2026) provide district-level evidence demonstrating that PMMY has played a vital role in supporting MSMEs, particularly in semi-urban areas. Despite this progress, the authors point out challenges related to loan repayment and monitoring mechanisms. Similarly, Sushmita (2025) observes that while PMMY has improved financial outreach, there is a pressing need to strengthen monitoring systems to ensure proper utilization of funds and to minimize instances of misuse.



- **Socio-Economic Impact and Beneficiary Characteristics:** An increasing number of studies have examined the socio-economic outcomes of PMMY and the influence of beneficiary characteristics on loan utilization. Rathee and Aggarwal (2024) find that access to microcredit under PMMY has contributed significantly to women's empowerment by increasing their participation in entrepreneurial activities. In another study, Jakhar (2025) analyzes the impact of PMMY on self-help group members and concludes that while access to credit has improved, the extent of income generation varies across beneficiaries depending on their socio-economic background. The study emphasizes that factors such as education, occupation, and income level play a crucial role in determining the effectiveness of loan utilization. Chaturvedi and Mishra (2024) further argue that financial literacy, awareness, and socio-economic status are key determinants influencing how beneficiaries utilize loans. Individuals with better educational and financial backgrounds are more likely to use funds productively, whereas others may face challenges related to inefficient utilization and repayment.
 - **Regional Disparities and State-Level Analysis:** A number of studies highlight the presence of regional imbalances in the implementation and outcomes of PMMY. Ezhilarasan et al. (2025) note that variations in financial infrastructure, awareness levels, and local economic conditions contribute to differences in loan uptake across states. Similarly, Ashwath and Sachindra (2025) observe that regions with stronger institutional support systems and higher levels of financial literacy tend to exhibit better performance in terms of loan disbursement and utilization. These findings underline the importance of conducting region-specific analyses to capture localized dynamics. Despite the availability of extensive national-level research, there is a noticeable lack of focused studies on Telangana. Considering the state's evolving economic landscape and expanding MSME sector, there is a clear need for empirical research that examines PMMY loan utilization patterns within this specific regional context.
3. **Research Gap:** From the literature review it was observed that there are several studies conducted on Pradhan Mantri Mudra Yojana (PMMY), while many studies primarily focussed on its overall performance, financial inclusion outcomes, entrepreneur development at macro level. But very limited attention was given to micro-level analysis, with particular to demographic and socio-economic characteristics influencing the loan utilisation pattern among beneficiaries. Furthermore, aspects like loan processing time, loan adequacy, beneficiary experience, effective utilisation of loan remains under explored. Focusing on all these aspects the present study aims to bridge the gap by providing a comprehensive and statistical analysis of select variables impact on the PMMY loan utilisation with reference to the Telangana State.

4. **Conceptual Framework:** It systematically examines the relationship between select demographic and Socio-economic variables and PMMY loan utilisation pattern. For the

Fig-1: Conceptual Framework of Demographic Factors & PMMY Loan Utilisation



Source: Developed By The Researcher

purpose of following variables such as, “Gender, Age, Education, Occupation and Income” are selected as an independent variable, while various dimensions of loan utilisation pattern including “awareness of the scheme, type of loan, preferred institution, purpose of borrowing, loan processing time and adequacy of loan” acts as a dependent variable. It assumes that differences in socio-economic background leads to variations in access to information, financial literacy and institutional interaction. Furthermore, it highlights the role of PMMY, that acts as a mediating platform facilitating financial inclusion and entrepreneurial development. By establishing systematically relationships it provides a structural approach to analyze how beneficiaries’ characteristics influence the overall impact of the scheme.

5. **Research Questions:** Based on the identified research gap and research framework of the study, following research questions are framed:

- What is the role of PMMY in supporting micro & small entrepreneurs in Telangana State?
- What is the relationship between demographic factors and loan utilization patterns under the Pradhan Mantri Mudra Yojana (PMMY)?

6. **Research Objectives:** Based on the above research questions following objective are framed:

- To present an overview of the PMMY in supporting micro & small entrepreneurs in the Telangana State.
- To analyze the relationship between select demographic factors and loan utilization patterns under the PMMY.

7. **Hypothesis:** Following hypothesis are framed with an aim to analyze the study objectives:

- **H₀₁:** There is no significant association between age and loan utilization patterns under PMMY.
- **H₀₂:** There is no significant association between gender and loan utilization patterns under PMMY.
- **H₀₃:** There is no significant association between education and loan utilization patterns under PMMY.
- **H₀₄:** There is no significant association between occupation and loan utilization patterns under PMMY.
- **H₀₅:** There is no significant association between income and loan utilization patterns under PMMY.

8. **RESEARCH METHODOLOGY:**

It provides a systematic framework for analyzing the relationship between the demographic characteristics and PMMY utilization patterns, ensuring that the findings are meaningful.

• **Research Design:** It adopted a descriptive and analytical research design. The descriptive aspect will help in understanding the profile of respondents and the general pattern of PMMY utilization, while the analytical component focuses on examining the relationship between demographic and loan utilization dimensions.

• **Sources of Data:** For the purpose of present study both primary and secondary data have been used. While the primary data was collected directly from PMMY beneficiaries through a structured questionnaire. Whereas, secondary data was obtained from journals, research articles, government reports, official PMMY portals, and other published sources to support the analysis and provide contextual understanding.

• **Sampling Technique and Sample Size:** The study adopts a convenience sampling method for selecting respondents due to accessibility and time constraints. A sample of beneficiaries who have availed loans under PMMY was selected for data collection. The sample size of 400 is considered adequate to represent the population and to perform statistical analysis effectively.

• **Variables of the Study:** For the purpose of present study demographic characteristics of respondents acts as independent variables and Loan utilization patterns under PMMY, including awareness, type of loan, type of bank, purpose of loan, processing time, and sufficiency of loan amount acts as dependent variables.

• **Tools and Techniques of Analysis:** The collected data were analyzed using appropriate statistical tools such as Percentage Analysis was used to describe the demographic profile and distribution of responses. While the Chi-square Test was adopted to examine the relationship between demographic factors and loan utilization variables. Moreover, the level of significance was fixed at 5% ($p < 0.05$) to test the hypotheses.

• **Scope of the Study:** The study focuses on beneficiaries of PMMY within a specific geographical area of the Telangana State, by analyzing their demographic characteristics and loan utilization pattern. It aims to provide insights into how different groups interact with the scheme.

9. **Data Analysis:** The following table-1, in detail represents the detailed demographic profiles of the respondents, including their gender, age, education, occupation, income, marital status, location and social category. From the table it was observed that among 400 respondents 52.5% are male respondents and 47.5% are female respondents. It highlights that scheme was equally accessed by the both genders almost equally reflecting a positive trend towards gender inclusivity in financial participation. In terms of respondents, it mainly concentrated in 26-35 age group with 47%, followed by 36-45 years, 18-25 years and 46-60 years. It highlights that

Table-1: Demographic Variables

Particulars	Variables	Percentage	Particulars	Variables	Percentage
Gender	Male	52.5%	Education	Primary Education	40.8%
	Female	47.5%		Secondary Education	34.2%
Age Group	18–25	14.5%		Higher Education	12.0%
	26–35	47.0%		Graduate	13.0%
	36–45	35.8%	Marital Status	Single	28.2
	46–60	2.8%		Married	68.5
Occupation	Unemployed	42.5%		Widow/Divorced/Separated	3.3

	Self-employed	39.3%	Respondents From	Hyderabad	48.8
	Small Business	16.3%		Rangareddy	41.3
	Others	2.0%		Medchal-Malkajgiri	10
Income Level	Up to ₹1,00,000	37.5%	Social Category	SC	23.5
	₹1–2 lakh	50.5%		ST	20
	₹2–5 lakh	10.3%		BC	47.8
	Above ₹10 lakh	1.8%		OC	8.8

Source: Primary Data Analysis

PMMY is predominantly utilised by the young and middle-age groups. While education levels shows that a significant portion of respondents have the primary education with 40.8%, followed by secondary education, graduation and higher education. Moreover, majority of respondents are married indicating 68.5%, followed by 28.2% are singles and remaining fall under another category. Further, occupational levels are revealed that 42.5% are unemployed, followed by 39.3% are self-employed, engaged in small business and very small portion fall under other occupations. Most of the respondents are from Hyderabad with 48.8%, followed by Rangareddy and Medchal-Malkajgiri. It indicates that higher concentration of beneficiaries from urban & semi-urban areas, it's due to better access to financial institutions and information. While majority of respondents fall under 1-2 lakh rupees with 50.5%, followed by less than one lakh, between 2-5 lakh and above 10 lakhs. Finally, majority of respondents fall under BC category with 47.8%, followed by SC, ST and OC. Overall, analysis revealed that PMMY is reaching effectively among economically weaker individuals with minimum level of education.

Loan Utilisation Pattern: While the demographic profile of respondents provides a clear understanding of the socio-economic background of PMMY beneficiaries. While it's equally important to examine how these individuals utilize the loan availability under the PMMY scheme. It can clearly be understood by analyzing the loan utilisation pattern, purpose, choice of financial institution and processing time and sufficient loan amount. Focusing on this the following table-2, represented a detailed overview of loan utilisation behaviour of respondents highlighting how beneficiaries engage with the scheme in practical terms.

Table-2: Loan Utilization Pattern

Variable	Category	Percentage	Variable	Category	Percentage
Loan Category	Shishu	57.80%	Institution	Private Banks	42.00%
	Kishore	32.00%		RRBs	26.50%
	Tarun	10.20%		Public Banks	24.80%
Purpose	Business Expansion	36.20%	Processing Time	Less than 1 Week	13.5%
	Equipment Purchase	28.50%		1–2 Weeks	38.5%
	New Business	27.80%		2–4 Weeks	36.0%
	Working Capital	7.50%		More than 1 Month	12.0%
Loan Sufficiency	Yes	86.0%	Loan Sufficiency	No	14.0%

Source: Primary Data Analysis

With regards to loan category majority of respondents are fall under Shishu category with 57.80%, followed by Kishore with 32% and Tarun with only 10.20%. It clearly indicates that most of the respondents are concentrated among the Shishu & Kishore Categories highlighting most beneficiaries are in the initial stage of their business developments and seeking initial capital loan amounts. Whereas, relatively lower portion is in higher loan category suggesting limited scaling up of enterprises and reflecting the cautious borrowing behaviour of beneficiaries.

While the purpose of loan indicating that significant portion of respondents use loan for business expansion with 36.20%, highlighting the beneficiaries already engaged in the income-generating activities and using funds for initial expansion of their business activities. Followed by for equipment purchase with 28.50%, new business establishment and working capital. it indicating comparatively very lower dependent on short-term financial needs. Related to preferred financial institution private banks accounted for 42%, followed by RRBs , public sector banks. It highlights the key role of private banks in loan disbursement under the PMMY scheme. Due to its faster processing time, better customer services and accessibility. While the moderate participation of RRBs and Public sector banks reflecting their moderate role in reaching rural & semi-urban populations.



The processing time reveals that, majority of the respondents received their loans within 1–2 weeks with 38.5%, followed by 2–4 weeks with 36% highlighting the relatively efficient loan processing system. While a smaller proportion of 13.5% received their loans within a week and only 12% of beneficiaries experienced delays in loan grants of more than one month. It highlighting that although the PMMY scheme ensures timely disbursement but few beneficiaries are still experiencing the delays, possibly due to the procedural and documentation issues.

Finally, majority of beneficiaries 86% said that they received substantial loan amount requirements while remaining 14% didn't received the substantial loan amount. Overall, it highlights that PMMY is primarily utilized for small-scale financial needs, particularly for business expansion and entrepreneurial activities. The preference for private banks and the moderate processing time indicate a functional but somewhat uneven service delivery mechanism. These findings emphasize the importance of strengthening institutional efficiency and encouraging the transition of beneficiaries from small to larger loan categories for sustained economic growth.

Demographic Characteristics and PMMY Scheme Utilization: The following table-3, explained the relationship between demographic characteristics with PMMY scheme utilisation by adopting Chi-Square (χ^2) analysis. The level of significance is fixed at $p = 0.05$, meaning that any p -value less than 0.05 indicates a statistically significant association.

Age and Loan Utilization: The Chi-square test analysis revealed that beneficiaries age is not a statistically significant determinant for most of the loan utilisation dimensions of PMMY. It revealed that the relationship between age and awareness ($\chi^2 = 14.82$; $p = 0.095$), type of loan availed ($\chi^2 = 6.185$; $p = 0.403$), type of bank preference ($\chi^2 = 17.85$; $p = 0.12$) and sufficiency of loan amount ($\chi^2 = 6.83$; $p = 0.77$) is found to be in-significant, as for all these factors p -values exceed the threshold limit of 0.05. It's indicating that beneficiaries from various age groups have relatively exhibited similar levels of awareness, indicating that PMMY outreach and accessibility are fairly uniform across all age categories. However, it exhibits a statistically significant association with the purpose of loan ($\chi^2 = 27.86$; $p = 0.001$) and processing time ($\chi^2 = 32.6$; $p = 0.0001$) suggesting that financial needs and borrowing objectives vary according to life stages and perceptions of loan processing efficiency differ across age groups, possibly due to differences in experience, urgency or expectations from financial institutions. Therefore, although age is not a dominant factor influencing overall loan utilization behaviour, hence, the null hypothesis H_{01} is rejected, as significant associations exist among few selected variables.

Table-3: Demographic Characteristics and PMMY Scheme Utilization Analysis

Particular	Age		Gende		Education		Occupation		Income	
	χ^2	P	χ^2	P	χ^2	P	χ^2	P	χ^2	P
Awareness	14.82	0.095	3.305	0.347	50.312	0.0001	36.412	0.0001	29.573	0.001
Type of Loan	6.185	0.403	0.754	0.686	26.842	0.001	8.378	0.212	2.748	0.84
Type of Bank	17.85	0.12	1.657	0.799	59.92	0.0001	24.416	0.018	28.872	0.004
Purpose of Loan	27.86	0.001	0.58	0.901	62.801	0.0001	44.848	0.0001	35.584	0.0001
Processing time	32.6	0.001	4.326	0.228	37.248	0.0001	29.749	0.0001	31.097	0.0001
Sufficient Loan	6.83	0.77	2.428	0.119	22.564	0.0001	9.251	0.026	13.316	0.004

Source: Primary Data Analysis

Gender and Loan Utilization: The analysis indicates that gender does not have a statistically significant relationship with any of the examined loan utilization variables under the PMMY scheme. From the analysis of data it was observed that awareness ($\chi^2 = 3.305; p = 0.347$), type of loan ($\chi^2 = 0.754; p = 0.686$), type of bank preference ($\chi^2 = 1.657; p = 0.799$), purpose of loan ($\chi^2 = 0.58; p = 0.901$), processing time ($\chi^2 = 4.326; p = 0.228$), and sufficiency of loan amount ($\chi^2 = 2.428; p = 0.119$) for all select factors the p-values are greater than 0.05, indicating that results are not-significant. This suggests that for both male and female beneficiaries it shows similar patterns in terms of financial awareness, borrowing decisions, institutional preferences and evaluation of loan adequacy. The findings imply that the PMMY scheme has been implemented in a manner that ensures equitable access across genders minimizing gender-based disparities in loan utilization behaviour. Therefore, gender does not act as a differentiating socio-demographic factor in influencing how beneficiaries engage with the scheme. Hence, the null hypothesis H_{02} is accepted, as no statistically significant associations are observed between the study variables.

Education and Loan Utilization: Education emerges as a highly significant determinant of PMMY loan utilization behaviour across all select dimensions. The Chi-square results indicate strong statistical significance between education and awareness ($\chi^2 = 50.312; p = 0.0001$), type of loan ($\chi^2 = 26.842; p = 0.001$), type of bank preference ($\chi^2 = 59.92; p = 0.0001$), purpose of loan ($\chi^2 = 62.801; p = 0.0001$), processing time perception ($\chi^2 = 37.248; p = 0.0001$) and sufficiency of loan amount ($\chi^2 = 22.564; p = 0.0001$) as all the p-values are below the 0.05 significance level. It clearly demonstrates

that educational level of beneficiaries playing a crucial role in shaping financial literacy, decision-making and overall engagement with the PMMY scheme. Moreover, educated respondents are likely to have better awareness of government schemes, it makes informed choices regarding loan products and select financial institutions based on service quality and convenience. Thus, education significantly influences both the cognitive understanding and practical utilization of PMMY benefits. Hence, the null hypothesis H_{03} is rejected, confirming a strong association between education and loan utilization patterns.

Occupation and Loan Utilization: Occupation is found to be a significant influencing factor for most aspects of PMMY loan utilization. The Chi-square analysis shows statistically significant relationships between occupation and awareness ($\chi^2 = 36.412$; $p = 0.0001$), type of bank preference ($\chi^2 = 24.416$; $p = 0.018$), purpose of loan ($\chi^2 = 44.848$; $p = 0.0001$), processing time ($\chi^2 = 29.749$; $p = 0.0001$) and sufficiency of loan amount ($\chi^2 = 9.251$; $p = 0.026$). However, the relationship between occupation and type of loan availed ($\chi^2 = 8.378$; $p = 0.212$) is not significant, indicating uniformity in loan type selection across occupational groups. These findings suggest that individuals engaged in different occupational categories such as agriculture, business, salaried employment, or self-employment vary in their exposure to financial information, banking access, borrowing objectives and evaluation of loan services. Occupation strongly shapes the functional use of credit and perceptions of institutional efficiency, likely due to differences in income stability, financial exposure and credit dependency. However, the choice of loan type remains relatively standardized under the PMMY framework. Hence, the null hypothesis (H_{04}) is rejected, as significant associations are observed in most variables.

Income and Loan Utilization: Income levels have significantly influenced multiple dimensions of PMMY loan utilization behaviour. The results show statistically significant associations between income and awareness ($\chi^2 = 29.573$; $p = 0.001$), type of bank preference ($\chi^2 = 28.872$; $p = 0.004$), purpose of loan ($\chi^2 = 35.584$; $p = 0.0001$), processing time perception ($\chi^2 = 31.097$; $p = 0.0001$) and sufficiency of loan amount ($\chi^2 = 13.316$; $p = 0.004$), while the association with type of loan ($\chi^2 = 2.748$; $p = 0.84$) is not significant. This indicates that individuals from different income groups vary significantly in their awareness levels, financial preferences and assessment of loan effectiveness. Higher-income respondents may have better exposure to financial institutions and greater flexibility in choosing banks and utilizing loans for productive purposes, whereas lower-income groups may depend more on accessibility and necessity-driven borrowing. Additionally, income strongly influences perceptions of loan adequacy and procedural efficiency, reflecting differences in financial expectations and repayment capacity. However, the uniformity in loan type suggests standardized loan structures under PMMY regardless of income level. Hence, the null hypothesis H_{05} is rejected, confirming that income is a significant determinant of loan utilization behaviour.



The overall findings of the study clearly indicate that socio-economic variables play a more dominant role than basic demographic characteristics in shaping PMMY loan utilization patterns. Education, occupation and income emerge as highly significant determinants influencing almost all dimensions of loan utilization, reflecting the importance of socio-economic status in financial decision-making and scheme utilization. In contrast, gender does not show any significant association with loan utilization variables, indicating equal participation and access across male and female beneficiaries. Age shows a mixed influence, being significant only in selected dimensions such as loan purpose and processing time. Overall, the results highlight that structural socio-economic factors are more influential than demographic attributes in determining how beneficiaries understand, access and utilize the PMMY scheme effectively.

10. **FINDINGS:** Based on analysis of the study following key findings are framed for the study:

- Majority of beneficiaries are males, belonging to 26-35 age group had their primary education and are married.
- Most beneficiaries are from Hyderabad, with an annual income ranging between ₹1-2 lakhs, indicating the schemes largely cater to young, moderate education and low- income individuals.
- Large portion of beneficiaries opted for Shishu category loan, for business expansion and approached private banks which processing loan formalities in 1-2 weeks.
- Age does not significantly influence awareness, type of loan, type of bank, or sufficiency of loan under PMMY. However, it significantly affects the purpose of loan and perception of processing time, indicating partial influence of age on loan utilization behaviour.
- Gender shows no statistically significant relationship with any of the loan utilization variables. This indicates that both male and female beneficiaries have similar levels of awareness, borrowing behaviour, and experience with the PMMY scheme.
- Education has a strong and significant association with all aspects of loan utilization, including awareness, loan choice, bank selection, purpose, processing time and sufficiency. This highlights the importance of educational attainment in financial decision-making.
- Occupation significantly influences awareness, bank preference, loan purpose, processing time and loan sufficiency, but not the type of loan. This suggests that occupational background shapes financial behaviour and credit experience.



- Income level significantly affects awareness, bank choice, loan purpose, processing time and loan adequacy. However, it does not influence the type of loan, indicating partial impact of income on utilization patterns.
 - The study finds that socio-economic variables such as education, occupation and income play a stronger role in loan utilization than basic demographics. These factors largely determine how effectively PMMY benefits are accessed and used.
 - Across most demographic variables, the type of loan shows limited variation and remains largely consistent. This suggests standardized loan structures under the PMMY scheme irrespective of respondent characteristics.
11. **POLICY RECOMMENDATION:** The analysis of demographic factors and loan utilization patterns under the Pradhan Mantri Mudra Yojana (PMMY), highlights the need for a more targeted and inclusive policy approach. Based on the findings, the following policy recommendations are proposed to enhance the effectiveness, accessibility and impact of the scheme.
- **Strengthen Financial Literacy Programs:** Since education significantly influences loan utilization, targeted financial literacy campaigns should be expanded, especially for less educated groups. These programs should focus on awareness, loan procedures and effective credit use under PMMY.
 - **Customized Awareness Campaigns Based on Socio-Economic Profile:** Policy interventions should design awareness programs considering occupation and income levels. Tailored communication strategies can ensure better outreach among self-employed, low-income, and informal sector workers.
 - **Simplification of Loan Processing Procedures:** As processing time is significantly associated with multiple demographic factors, banks should simplify documentation and approval processes. Digital platforms and single-window systems can help reduce delays and improve user experience.
 - **Strengthening Bank-Level Outreach Programs:** Since bank choice is influenced by education, occupation and income, banks should proactively conduct outreach programs in rural and semi-urban areas. This will improve access and trust among marginalized groups.



- **Enhancing Equitable Access Across Income Groups:** Income significantly affects loan utilization patterns; therefore, special support mechanisms should be introduced for low-income borrowers. This may include flexible repayment options and advisory services.
- **Standardization with Flexibility in Loan Products:** As type of loan shows limited variation across demographics, PMMY loan structures should remain standardized. However, flexibility can be introduced in repayment schedules to suit different occupational needs.
- **Targeted Support for Occupational Groups:** Since occupation influences most loan utilization aspects, sector-specific financial support systems should be developed. For example, separate guidance for agriculture, small business, and informal workers can improve effectiveness.
- **Continuous Monitoring and Feedback Mechanism:** A robust monitoring system should be established to regularly assess beneficiary experiences. Feedback collection will help improve scheme implementation and ensure better alignment with user needs.

The overall proposed policy framework emphasizes a targeted, inclusive, and efficient approach to PMMY implementation. By addressing demographic disparities, simplifying processes and strengthening institutional support, the scheme can achieve its objective of promoting entrepreneurship and financial inclusion more effectively.

12. CONCLUSION

It analyzed the relationship between select beneficiary dimensions namely age, gender, education, occupation and income and key dimensions of loan utilisation aspects of PMMY such as awareness, loan category, type of bank, purpose of loan, processing time and adequacy of loan. The study adopted percentage and chi-square test to examine the relationship between the select independent and dependent variables at five percent level of significance. With an objective to understand the how demographic & socio-economic variables shapes the utilisation behaviour of beneficiaries under the PMMY Scheme. The results indicates that the influence of demographic factors on loan utilisation is not significant across all the dimensions. In this age of beneficiaries has only significant relationship with the purpose of borrowing and perception of loan processing time. In contrast beneficiary gender doesn't exhibit any significant association with select loan utilisation variables. Among all variables education level of beneficiaries emerges as a highly significant impact on all the dimensions of loan utilisation. It suggests that individuals with higher educational level tend to poses better financial awareness, strong decision-making abilities and greater capabilities to utilize credit effectively. Similarly, occupation levels significantly affecting awareness levels, preferred bank, purpose of loan,



processing time and loan adequacy although it doesn't appear to influence the type of loan. Income also identified as critical determinant of loan utilisation, by significantly affecting awareness, proffered bank, type of loan, processing time and sufficient loan. Overall, findings suggest that socio-economic factors such as education, occupation and income have more significant influence on, loan utilisation than demographic variables such as age and gender. It emphasizes the need for more focused policy measures aimed at enhancing financial literacy, simplifying procedural requirements and designing supportive mechanism customized to different occupational and income groups. Strengthening these areas can improve the overall effectiveness of PMMY and promote more balanced and productive use of institutional credit among diversified beneficiary groups.

13. REFERENCES:

- Aggarwal, N., & Manjeet. (2022). Impact of PMMY on MSME sector growth. *Journal of Pharmaceutical Negative Results*, 13(Special Issue), 6407–6412.
- Ashwath, R., & Sachindra, G. R. (2025). Financial performance of PMMY in India (2016–2024): An econometric case study. *South Asian Journal of Social Studies and Economics*.
- Chaturvedi, A., & Mishra, S. S. (2024). A comprehensive review of Mudra loan scheme: Implications for MSME development. *Smart Moves Journal IJOSCIENCE*.
- Ezhilarasan, G., Maneesha, G., Srilekha, A., & Subash, R. (2025). A study on MSME sector: A special reference to Pradhan Mantri Mudra Yojana (PMMY) scheme. *International Journal of Research and Innovation in Applied Science*.
- Jakhar, Y. S. (2025). Role of microfinance in rural development of India: An evaluation of NRLM and PMMY efficacy. *Universal Research Reports*.
- Kumar, J. S., & Shobana, D. (2025). An analytical study of the Pradhan Mantri Mudra Yojana (PMMY): Impact on financial inclusion, entrepreneurship, and economic growth. Retrieved from <https://www.researchgate.net>
- Kumar, P. S., & Varadarajegowda, G. C. (2026). Economic evaluation of PMMY and its impact on MSMEs: A district-level study. *International Journal of Latest Technology in Engineering Management & Applied Science*.
- Rajagopal, D. (2022). An investigation into Pradhan Mantri Mudra Yojana (PMMY): A study on financial inclusions. *International Journal of Recent Advances in Multidisciplinary Topics*, 3(7), 78–81. Retrieved from <https://journals.ijramt.com/index.php/ijramt/article/view/2270>



- Rathee, S., & Aggarwal, D. (2025). Examining the interrelation between microcredit, entrepreneurship and women's empowerment: An insight into the effectiveness of Pradhan Mantri Mudra Yojana (PMMY). *SEDME (Small Enterprises Development, Management & Extension Journal)*, 52(1), 26–37. <https://doi.org/10.1177/09708464241291285>
- Reddy, S. M. (2025). Financial performance analysis of Mudra Yojana (2018–2022): A research study. *International Journal of Advances in Business and Management Research*. <https://doi.org/10.62674/ijabmr.2025.v3isupp2.0017>
- Sheba, M. S., & Vasanthi, T. (2024). Impact of the Pradhan Mantri Mudra Yojana (PMMY) on rural entrepreneurship development. *ShodhKosh: Journal of Visual and Performing Arts*, 5(5), 640–643. <https://doi.org/10.29121/shodhkosh.v5.i5.2024.4351>
- Sushmita, Kumar, A., Singla, J., & Malhotra, R. (2025). Financial inclusion under the Pradhan Mantri Mudra Yojana. *European Economic Letters*, 15(1). <https://doi.org/10.52783/eel.v15i1s.3291>
- Varma, R. (2023). Financial inclusion and microfinance in India: A study of PMMY beneficiaries. *International Journal of Finance and Economics*.

14. Web-Site Visited:

- Ministry of Micro, Small and Medium Enterprises (MSME), Government of India – <https://msme.gov.in>.
- Micro Units Development and Refinance Agency (MUDRA) – <https://www.mudra.org.in>.
- Reserve Bank of India (RBI) – <https://www.rbi.org.in>.
- Government of India Official Portal – <https://www.india.gov.in>.
- National Sample Survey Office (NSSO) – <https://mospi.gov.in>.
- Telangana State Government Portal – <https://www.telangana.gov.in>.